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NOTES ON SOME USES OF BELLS AMONG THE GREEKS AND ROMANS

BY ARTHUR STANLEY PEASE

THE history and uses of bells have formed the subject of not a few books and articles in periodicals, but although these contain much valuable material, no sufficiently comprehensive and accurate treatment of the bells of the classical period has yet appeared. Dr. Heinrich Otte in his *Glockenkunde* (2d ed., Leipzig, T. O. Weigel, 1884) gives a useful bibliography of some of the works upon the subject, but in nearly all of these the interest has centered rather in the bells of the Middle Ages than in those of the Greeks and Romans. In this article it is my purpose to discuss and criticise a book by M. l'Abbé L. Morillot, Curé of Beire-le-Châtel, entitled *Étude sur l'Emploi des Clochettes chez les Anciens et depuis le Triomphe du Christianisme* (Dijon, Damongéot et Cie., 1888).

This work is probably the best of those undertaking to deal with the bells of the classical period, and contains an accumulation of valuable facts and references. But while the literary side of the evidence has been more or less exhaustively collected, its interpretation is in several places superficial, faulty, or altogether lacking, and the monumental evidence, when one considers the large amount of it obtainable, is too often meagre. My researches into the subject have convinced me of the extreme difficulty of presenting anything like an absolutely complete treatment of the monumental evidence, but what material and conclusions I have obtained I shall introduce here in the form of a supplementary comment upon this work of M. Morillot, following rather closely the order of topics adopted by that author.

Some passages which occur in philosophical writings and are of a very general nature are not referred to by M. Morillot, who perhaps has considered them as lying outside the field of his work. The most important of these passages is by Iohannes Alexandrinus of Caesarea, called Philoponus, bishop of Alexandria, who lived probably about the

beginning of the sixth century of our era (Krumbacher, *Gesch. d. Byz. Litt.*, 2d ed., p. 581). In his work, *De Anima*, p. 355, 13, Hayd., he says: τὰ δὲ ἡχεία καὶ τὰ κύμβαλα πληττόμενα ἐπίμονον ποιεῖ τὸν ψόφον, τοῦτο δὲ διὰ τὴν κοιλότητα. ἀπολαμβάνεται γὰρ ὁ ἀὴρ ἐν τῇ κοιλότητι, ὅς εἰλούμενος ἐπὶ πολὺ περὶ τὸ κοίλωμα ἐξελθεῖν μὴ δυνάμενος παρατείνει τὸν ψόφον. καὶ ἐν τοῖς κυρτοῖς δὲ ἑαυτοῦ μέρεσι πληττόμενος ὁ κῶδων ἐπὶ πλείονα χρόνον ἡχεί, ὅταν ἀπὸ τινος λεπτοῦ ἱμάντος ἀπηρτημένος ᾖ. ἡ δὲ αἰτία ἣ αὕτη· πληττόμενος κινεῖται, κινούμενος δὲ κινεῖ τὸν ἐν τοῖς κοιλώμασιν ἐναπειλημένον ἀέρα, ὅς πάλιν ἐπὶ πολὺ εἰλούμενος καὶ τῷ χαλκῷ προσκρούων παρατείνει τὸν ψόφον. . . . τοῦτο δὲ διότι μὴ κινούμενον τὸ ἡχείον οὐ κινήσει τὸν ἐντὸς ἀέρα. With this compare Theophrastus, *Sens.* 9, where he is speaking of the doctrines of Empedocles: τὴν δ' ἀκοὴν ἀπὸ τῶν ἐξῶθεν γίνεσθαι ψόφων· ὅταν γὰρ ὑπὸ τῆς φωνῆς κινήθῃ ἡχείον ἐντός. ὥσπερ γὰρ εἶναι κῶδωνα τῶν ἔσω ἡχῶν τὴν ἀκοὴν ἣν προσαγορεύει σάρκινον ὄζον. κινουμένην δὲ παίειν τὸν ἀέρα πρὸς τὰ στερεὰ καὶ ποιεῖν ἦχον.

Among the names by which bells were called (p. 3), M. Morillot gives little or no attention to the following. In Greek χαλκόν, in Latin *aes* is used as the name of a sonorous instrument or instruments. The ambiguity of these words often makes it impossible to determine exactly what one of various instruments is meant. The diminutive form κωδώνιον is twice mentioned by Herodian in lists of words (περὶ καθολικῆς προσφθίας, I, p. 361, 23; 364, 9, Lentz), and in Iohannes Alexandrinus (*De Anima*, p. 356, 20 and 25, Hayd.). ἡχείον is a term used in several places (e.g. Plut. *Crass.* 23) and may perhaps sometimes refer to bells, though in Vitruvius the reference is to another thing (see M. Morillot, p. 11). λέβης sometimes means a resonant body, probably more or less bell-shaped, but without a tongue, and struck either by some sort of a hammer (Apollod. *Fr.* p. 402, Heyne, from Schol. ad Theocr. 2, 36, to be quoted later; Hdt. 6, 58; probably the same idea also in Strabo, 7, p. 329, *Fr.* 3), or by concussion with another of its own kind (Suidas, *s.v.* Δωδωναῖον Χαλκείον; Eustath., p. 1760, ad Hom. *Od.* 14, 327). Compare with this use of λέβης the Latin word *cacabulus*, of which I shall have more to say later on. The earliest possible mention of the much-disputed word *nola* is in Avianus, *Fab.* 7, 8 (of the fourth or fifth century), where some read the form *nolam*. But as the quantity of the *o* in *nola* makes a difficulty in the metre (which Ellis in

his edition admits, but tries to explain away), and if *nolam* be read the next line is tautological, it seems probable that some other word should be read here, perhaps *notam*, which is read by Lachmann and Fröhner. The *discus*, a disk-shaped piece of bronze suspended vertically on an axis, the ends of which were, in their turn, suspended, was an instrument similar in its use to the bell. Some have been discovered, but it is not my purpose to treat of them here any more than of cymbals and drums. Of course, in addition to the terms mentioned, periphrases are occasionally used for the idea of *bell* (e.g., perhaps, *ποίημα χάλκεον*, Luc. *Syr. Dea*, 29), but these periphrases are at times as ambiguous as the terms *χαλκόν* and *aes*.

M. Morillot entirely ignores the question whether the ancients used bells hung upon lateral pivots like our church bells. The usual method of hanging them was doubtless by a cord or thong, as in the passage already quoted from Iohannes Alexandrinus—*ἀπό τινος λεπτοῦ ἱμάντος ἀπηρτημένος*. And practically all the bells of which we have ancient illustrations or existing remains are intended to be thus hung. Yet the statement has been made that bells upon lateral pivots were used. The contention rests upon a scene on a fountain in the hippodrome at Constantinople (*Rev. Arch.*, 1845, pl. 29). This scene represents two posts, joined by a cross-piece at the top. Between them is swung, undeniably upon lateral pivots, an urn which, to judge from the size of men standing beside it, is about two and one-half or three feet high. Its shape is spherical, flaring somewhat at the mouth, which is turned downward and from which a small round ball is just falling. At the left of the framework stands a man who with his left hand turns the jar around, and at the right another who strikes it with a flail. Ch. Texier, the author of the article in the *Rev. Arch.*, says (p. 147): "Je vois en effet dans le second sujet deux hommes qui frappent un vase d'airain, une cloche d'une forme particulière suspendue dans son châssis. . . . L'homme de gauche est chargé de faire tourner sur son axe le vase dans lequel sont répandues des boules de bronze, l'une vient de tomber. L'autre homme frappe sur la surface avec un fléau pour augmenter le bruit de l'airain. C'est pour annoncer l'ouverture des courses." The race course with the *metae* and a *quadriga* is sculptured close by this scene. But this would be a strange sort of bell in which the substitute for a tongue consisted only of little balls which were almost sure to

tumble out of the wide mouth of the jar every time it was turned upside down. Another suggestion is given by G. Fougères, *La vie publique et privée des Grecs et des Romains*, p. 60, fig. 410, namely, that this may be a method of drawing lots for the positions of the different *quadrigae* in the races, and that the balls represent lots. While this is not a very satisfactory explanation, it is better than the other. The fact, also, that there seems to be no other undoubted case of bells upon lateral pivots goes far to contradict the theory that such a bell is here shown.

Having discussed the names and forms of bells, M. Morillot divides the uses into profane and religious. The first point under the former heading is concerned with doorbells. The author states (p. 7) that the ancients placed bells at the doors and in the interiors of their houses, and he cites the well-known passage in Suetonius (*Aug.* 91). But this question cannot be so easily dismissed. Where and how was the doorbell hung? By whom was it rung? And to summon whom? The two most probable theories are: (1) that the bell was rung by the visitor outside the house as a signal to the *ostiarius* to open the door; (2) that the visitor knocked or kicked on the door, or shouted to the *ostiarius* to open it, and that the *ostiarius*, who was chained to his post, rang the bell to call the *atriensis* or some other slave to conduct the visitor within and announce his arrival to the master of the house. It is hard to believe that sometimes there was no one to attend to the door, and that the visitor announced himself by rapping or using a knocker and then entered, yet this can be gathered from the following passage from Plutarch, *De Curios.*, 3, p. 516 E, F: *καίτοι μὴ κόψαντά γε θύραν εἰς οἰκίαν ἀλλοτρίαν οὐ νομίζεται παρελθεῖν· ἀλλὰ νῦν μὲν εἰσι θυρωροί, πάλαι δὲ ῥόπτρα κρονούμενα πρὸς ταῖς θύραις αἰσθησθην παρέχεν, ἵνα μὴ τὴν οἰκοδόσποιναν ἐν μέσῳ καταλάβῃ ὁ ἀλλότριος ἢ τὴν πάρθενον, ἢ κολαζόμενον οἰκέτην ἢ κεκραγνίας τὰς θεραπαίνδας.* The *ianitor* is first mentioned in Plaut. (*Men.* 673), but too little is stated about him for us to be sure of his duties. Later, however, we find that he was chained at the door, probably just inside. (The *ante foras* in Tibull. 1, 1, 56 might mean nothing more than that the doorkeeper was facing the door. If it be objected that this passage from Tibullus is untrustworthy because it is entirely metaphorical, the reply may be made that if the description be not true to life then the whole force and vividness of the metaphor is gone.) Passages which

indicate that the *ianitor* was chained are the following: Columella, 1, *praef.* § 10; Afranius in Festus, *s.v. tintinnire*; Ov. *Am.* 1, 6, 1; Suet. *De Clar. Rhet.* 3. In the last passage cited the custom of chaining the *ianitor* is called a *vetus mos*. Now certain passages indicate that the *ianitor* was a person to be conciliated by one who wished to obtain admission into the house (Plat. *Protag.* 314 D; Columella, *l. c.*; Hor. *C.* 3, 14, 23-24; and perhaps there is a hint of this in Hor. *C.* 3, 11, 15-16). Many times also the visitors call out to the *ianitor* (e. g. Ov. *Am.* 1, 6, 1-2; Plaut. *Stich.* 308). Now that all this should have gone on between persons so far apart or separated by such obstacles that a bell was necessary to call the attention of one to the other seems improbable. Besides these reasons, Marquardt shows (*Privatleben*, p. 235, note 5) that it was customary for the main door of the house to stand open during the daytime. Hence there appears to be nothing to hinder the theory that the *ianitor* was so stationed that he could easily speak to all comers and be addressed by them. When addressed, if he saw fit, he admitted them within and rang a bell to call the *atriensis* who in earlier times, before the introduction of the *ianitor*, may have been the one to respond to knocks upon the door. Plaut. *Asin.* 382-3:

i puere, pulta
Atque atriensem Sauream, sist intus, evocato huc.

In Petronius, *Cena Trimalch.* 73, the *atriensis* rescues two tipsy fellows who have been so scared by the dog at the door that they have fallen into a *piscina* close by. This would not indicate that the *atriensis* acted as doorkeeper, but rather that he had a general oversight of that part of the building and therefore naturally hurried to the spot where anything was going wrong. That the *ianitor* did not conduct the visitor within or announce his arrival is plain from the fact that he was chained. Yet even in the period when *ianitores* were employed, it is probable that there were households which did not possess them. Especially would this be the case with poor citizens and with those living in the country. Indeed Varro says (*R. R.* 1, 13) that the room of the *vilicus* should be near the door so that he may know who is coming in or going out at night, and that this is especially necessary when there is no *ostiarius*. We know that bells were sometimes used, however, in

country houses, since in the remains of the villa near Bosco Reale a bell has been found in place. It is a small bell of bronze and is hung *inside* the door. "Ma il curioso è, che non fu trovato a terra, ma aderente al muro ed all' altezza di un uomo, per la qual cosa si suppose che avesse servito per segnare alla porta" (A. Pasqui in *Monum. Antichi*, VII (1897), p. 404; Villefosse in *Monum. et Mémoires*, V, p. 20). Now it is a perfectly possible supposition that in houses in which there was a *ianitor* he rang this bell and summoned the *atriensis*, but that where there was no *ianitor* the visitor passed through the open outer door and rang it himself. How early bells were used for this purpose, I think we cannot determine. For their use at the doors of town houses we have several bits of evidence. Mau, in the *Bullettino*, XVI (1901), p. 332, describes "eine 0.09 (= $3\frac{1}{2}$ in.) hohe Bronzeglocke, mit einem eisernen Nagel im Henkel," found in a house in Pompei on March 15, 1900 (cf. *Not. d. Sc.*, 1900, p. 98). This bell, though not actually in position, Mau considers to have been the doorbell of the house. Again, Mau in *Bullettino*, XIII (1898), p. 58, describing a house in Pompei—*Insula* VI, 15—"Im Eingange fand man das eiserne Thürschloss und am Fusse des r. Pfostens eine bronzene Glocke (h. 0.106 [= $4\frac{3}{8}$ in.]); es ist wohl kaum zu bezweifeln . . . dass man an ihr läutete um Einlass zu verlangen." For other such bells see Mau, *Bullettino*, XVI (1901), p. 363 (cf. *Not. d. Sc.*, 1901, p. 204); *Bullettino*, XIII (1898), p. 30. In *Bullettino*, XIII (1898), p. 22, we have mention of a bronze bell 0.105 m. [$4\frac{1}{4}$ in.] high, found in *Insula* VI, 15, at Pompei, *inside the posticum*.

The statement of M. Morillot, on p. 8, that bells have been found at Pompei and Herculaneum still in place inside rooms is tantalizing by absence of any evidence cited by the author for his statement. I find no certain indication of this custom, though bells have been found inside houses, generally not in place, and these may have been used as *hand-bells* for one purpose and another, as, for instance, at meals as a signal for changing the courses, or to call servants. A passage in Seneca may perhaps refer to this (*Brev. Vit.* 12, 5).

In the passage quoted by M. Morillot, on pp. 7-8, from Lucian, *De Merc. Cond.* 24, it is quite possible that this rising bell was not used to wake the whole household, but merely the dependents and slaves. Cf. also § 31 of the same work.

On p. 9, M. Morillot says: “. . . si l'on en croit le dernier traducteur du *Ration. div. Officiorum* de Durand de Mende (T. I^{er}, p. 356), on aurait trouvé dans les thermes de Dioclétien en 1548 une clochette de bronze sur laquelle on lisait: *Firmi balneatoris*.” This statement may be traced farther back than the author has done. In the appendix of Fulvius Ursinus to the work of P. Ciaccio, *De Triclinio*, pp. 130–131 of the edition of 1664, we read: “Ipsa vero lavandi hora indicabatur sonitu tintinnabuli, ut conjici potest ex versibus Martialis, quos infra ponemus, et ex aereo item tintinnabulo, quod extat apud me, cum inscriptione FIRMI BALNEATORIS repertum in Esquilis anno M.D.XLVIII. in ruinis thermarum Diocletiani Imperatoris.” The words *apud me* I take to mean ‘in my private collection.’ Fulvius Ursinus was born in 1529 and died in 1600. This work was first published in 1588. See P. de Nolhac, on *La Bibliothèque de Fulvio Orsini*, p. 3, in *Bibliothèque de l'École des hautes Études*, LXXIV (1887). The discrimination, accuracy, and reliability of Orsini are testified to in the work of Nolhac on pp. 33–34, 36; and on p. 53, note 2, it is stated that this bell is found at the end of the inventory of the collections of Orsini.

For the fish-market bell (M. Morillot, p. 10) see also Sext. Empir. *adv. Math.* 8, 193, to be quoted later.

It is difficult to see why M. Morillot classes the use of bells upon the tomb of Porsenna (p. 11) among profane usages. On the contrary, I should be strongly inclined to assign them to some religious or prophylactic use. May they not be connected with the bells upon the car which carried the body of Alexander the Great (M. Morillot, p. 49), with the numerous bells found in tombs (see M. Morillot, p. 50, and my comment on that passage), and perhaps even with the bells hung by Augustus upon the temple of Jupiter Tonans (M. Morillot, pp. 57–58)? Undoubtedly the sound of bronze was believed to have purifying powers. The scholiast on Theocritus, 2, 36, says: ἐπειδὴ ἐνομίζετο καθαρὸς εἶναι (sc. ὁ χαλκός) καὶ ἀπελαστικός τῶν μiasμάτων. Cf. Tibull. 1, 8, 21–22; *Annali*, 1875, pp. 59 ff. Now that dead bodies, as well as living, needed protection from malignant influences, such as the evil eye, seems to be indicated by the bells found *inside* tombs, often accompanied by other articles of supposed prophylactic powers. May not these bells upon the outside of a tomb have been merely a more conspicuous and perhaps, therefore, a more effective way of warding off evil influences?

In speaking of bells upon the necks of dogs, Morillot fails to mention the passage in Avianus, to which I have already referred. It occurs in *Fab. 7 (De Cane)*, 7-10:

Hunc dominus ne quem probitas simulata lateret,
Iusserat in rabido gutture ferre † nolam. [notam]
Faucibus innexis crepitantia subligat aera,
Quae facili motu signa cavenda darent.

Even if *nolam* must be replaced by *notam* the meaning is plain enough. The gloss from Albinus which Ellis in his edition of Avianus quotes, on p. 64 of his commentary, does not seem apposite. It is: "Crepitacula dicit: ea vero domini etiam furtivis appendebant ut quaquā irent a villico audiri possent." This would apply to cows, but plainly not to dogs. The bell here mentioned is, of course, to give warning to people: *cave canem*. Froehner, *Cat. des Antiq. du Mus. de Marseille*, No. 1254, mentions a gray terra-cotta dog, seated, with a bell on his neck. The figure is .096 m. ($3\frac{7}{8}$ in.) high.

For bells upon horses (Morillot, pp. 12-13) we find additional information by Bruzza, in *Comment. Phil. in hon. Theod. Mommseni*, p. 559, where he says that at Ascoli, in Picenum, were found some bands to be used upon the breasts of horses. From one of these, which has been taken to Holland, hang, at intervals of 3 cm. ($1\frac{3}{8}$ in.), a little axe, fruits, and, among other things, eight bells, square at the base, elongated in shape, and without tongues. These articles plainly suggest a superstitious purpose for bells upon horses, and I believe that many such bells are to be thus interpreted. A more doubtful case is described in the *Compte Rendu* for 1865, p. 11. Near the village of Steblejevka, in the tomb of a so-called priestess of Demeter, with earrings, rings, representations of Demeter, Kore, and Herakles, were found thirty-eight little bells. See pl. V, 7. L. Stephani thinks they were bells of horses, that two are missing, and that originally four horses (why four?) had ten bells each. This is, of course, mere conjecture. See also Stephani, *Compte Rendu*, 1876, p. 115, for a bronze bell from South Russia, probably intended to be attached to a horse's harness.

In regard to bells upon flocks and herds (M. Morillot, pp. 13 f.), the gloss of Albinus cited a few lines above may be noted. A passage in

Sidonius also refers to this use: "inter greges tintinnabulatos per depasta buceta reboantes" (Sid. *Ep.* 2, 2, 14). Many bells are discovered of whose uses we cannot be certain, and some of these were probably intended for use upon flocks (e. g. one mentioned in *Not. d. Sc.*, 1879, pp. 24, 233). Another bell mentioned in this same reference seems less probable, inasmuch as it was discovered in the atrium of a house at Pompei. It is described, however, as "campana per bestiame a base ellittica, alta mill. .97 ($3\frac{7}{8}$ in.)."

In the *Monumenta Matthaciana* (Rome, 1779), I, pp. 10-11, and pl. XIII, Bacchus is represented as riding upon an ass to whose neck a bell is attached. Cf. Barré and Roux, *Musée Secret*, pl. LV, for Pan upon an ass wearing a bell. The *Annali*, 1834, p. 38, mention three bells found in a tomb near Ruvo, in Apulia, which are similar to those used upon the necks of mules, but it would seem more advisable to consider them as not differing in *purpose* from other bells found in tombs.

An especially unsatisfactory portion of M. Morillot's book is that which deals with bells upon the necks of elephants. For such bells appearing upon coins of the Caecilian gens, I give a fuller description than that of Morillot. The examples I shall cite are taken, for the most part, from the following books: (1) Fulvio Orsini, *Familiae Romanae*, Rome, 1577; (2) C. Patin, *Familiae Romanae . . . ex Bibliotheca Fulvii Ursini*, Paris, 1663; (3) J. Vaillant, *Nummi Antiqui Familiarum Romanarum*, 2 vols., Amsterdam, 1703; (4) *Thesaurus Morellianus*, arranged by A. Morelli, with commentary by S. Havercamp, 2 vols., Amsterdam, 1734; (5) G. Riccio, *Le Monete delle antiche Famiglie di Roma*, Naples, 2d edition, 1843. The figures vary in these different works, so I shall tabulate them for greater convenience. Of one or two coins, not appearing in these works, I shall give a more detailed treatment a little later on. Not all the figures show bells upon the elephants' necks. I have indicated with asterisks the places where bells are shown. A, B, and D also should really be indicated with asterisks in Morelli, for, though they do not appear with bells in the figures, Havercamp says in his comment, Vol. I, p. 49, b: "Notari vero debet, in denariis gentis Caeciliae meliuscule servatis passim illud tintinnabulum, ut adverti in nummis Tab. I, num. 1, 2, 5, ubi a Morellio non expressa sunt."

	ORSINI	PATIN	VAILLANT	MORELLI	RICCIO
A	p. 37, [fig. 1]	*p. 48, [fig. 1]	pl. XXVIII, 12	Vol. II. <i>Caecilia Gens</i> , pl. 1, fig. 1	pl. IX, fig. 2
B	p. 37, [fig. 2]	*p. 48, [fig. 2]	pl. XXVIII, 13	Vol. II. <i>Caecil.</i> pl. 1, fig. 2	pl. IX, fig. 1
C ¹	*p. 37, [fig. 3]	*p. 48, [fig. 4]	*pl. XXIX, 24	Vol. II. <i>Caecil.</i> pl. 1, fig. 4	pl. IX, fig. 3
D	p. 37, [fig. 4]	p. 48, [fig. 5]	pl. XXIX, 15	Vol. II. <i>Caecil.</i> pl. 1, fig. 5	*pl. IX, fig. 5
E		*p. 50, [fig. 4]	*pl. XXVIII, 14	*Vol. II. <i>Caecil.</i> pl. II, fig. 4	*pl. IX, fig. 4

The descriptions of these coins I take from Havercamp. Remarks enclosed in square brackets are my additions.

- A. *Obverse*: ROMA. Caput dei Triumphi, cum adposita denarii nota. . . . *Reverse*: M. METELLVS, Q. F. Caput elephantinum in umbone clypei Macedonici, qui laureae inclusus est. [Bell on neck of elephant.]
- B. *Obverse*: Similis est superiori, sed pro capite dei Triumphi Romae galeatum caput exhibet. *Reverse*: [Very similar to A.]
- C. *Obverse*: Romae caput galeatum cum denarii nota. *Reverse*: C. METELLVS. Figura virilis, in bigis elephantorum, cui advolans per aërem Victoria sertum porrigit. [A bell on the neck of the nearer elephant.]
- D. *Obverse*: Caput Romae galeatum cum denarii nota. *Reverse*: ROMA. Roma hastata et armata in citis bigis, subtus elephantii caput est. [With bell on its neck.]
- E. *Obverse*: Caput . . . Iovis Capitoli cum nota semmissis. *Reverse*: ROMA. Prora navis cum nota eadem, desuper elephantii caput est cum tintinnabulo dependente ex collo.

M. Morillot says (p. 16) that the elephant with a bell appears as a frequent emblem on the coins of the Caecilian gens, but if he had

¹ See also Gysbert Kuiper (Cuperus), *Liber de Elephantis in nummis obviis* (1719), p. 115.

inquired into the reason he would not have made the statement that he makes immediately afterward: "Il sera question des éléphants sacrés de l'Inde et de leurs clochettes traditionnelles." Several passages in ancient authors show the reason for the representation of these elephants, though unfortunately not for their bells. Eutropius, 2, 24: "L. Caecilio Metello, C. Furio Pacilo coss. [i. e. 251 B.C.] Metellus in Sicilia Afrorum ducem cum cxxx elephantis et magnis copiis venientem superavit, xx milia hostium cecidit, xxvi elephantos cepit, reliquos errantes per Numidas, quos in auxilium habebat, collegit et Romam deduxit ingenti pompa, cum cxxx elephantorum numerus omnia itinera compleret." Substantially the same account appears in other writers, but with variations in the number of the elephants (e. g. Orosius, 4, 9, 15—104 in the triumph; Livy, *ex lib.* 19—120 in the triumph; Dion. Hal. 2, 66—138 in the triumph; Plin. *H. N.* 8, 16—140 or 142 in the triumph. See also Front. *Strateg.* 1, 7, 1, for transportation of elephants from Sicily to Italy). P. Armandi, in his *Histoire Militaire des Éléphants* (1843), proves that the elephants of the Carthaginians were not imported from Asia, but were obtainable within comparatively easy reach of Carthage (see Appian, *Bell. Pun.* 9, 13; Front. *Strateg.* 4, 7, 18; Hannon, *Peripl.* ap. Hudson, *Geogr. Min.* 1; Diod. Sic. 3, 10; Strabo, 17, 2; and other references given in Armandi, pp. 14 ff.).

Although elephants were at the time of Metellus a very unusual sight to the Romans, yet he was not the first to use them in a triumph. Plin. *H. N.* 8, 16: "Elephantos Italia primum vidit Pyrrhi regis bello, et boves lucas appellavit in Lucanis visos anno urbis quadringentesimo septuagesimo secundo, Roma autem in triumpho septem annis ad superiorem numerum additis, eadem plurimos anno quingentesimo secundo victoria L. Metelli pontificis in Sicilia de Poenis captos; centum quadraginta duo fuere aut, ut quidam, cxi transvecti ratibus, quas doliorum consertis ordinibus imposuerat." Seneca, *Brev. Vit.* 13, 3: "Primus Curius Dentatus in triumpho duxit elephantos." See also the references in Daremberg and Saglio, *Dict. des Antiq.* II, p. 538, note 68. Armandi, *op. cit.*, p. 122, gives the pedigree of these elephants of Pyrrhus, which were really Asian elephants. They had come from the East in two lines of descent, one through the possession of Seleucus Nicator (called in Athen. 6, 261 B, 'ἐλεφαντάρχου') and Ptolemaeus Ceraunus, the other through those of Antigonus and Demetrius Polior-

cetes. Ptolemaeus Ceraunus gave some elephants to Pyrrhus, and Pyrrhus captured some from Demetrius.

Other representations of elephants carrying bells are the following: In the necropolis of Myrina, in Mysia, was found a terra-cotta elephant 0.12 m. ($4\frac{3}{4}$ in.) high, with a howdah on his back, a driver upon his shoulders, and a bell hanging from his neck. He is about to trample upon a Galatian soldier (*Bull. Corr. Hell.* IX (1885), pp. 485 ff., pl. XI; G. Fougères, *La Vie publique et privée des Grecs et des Romains*, fig. 516; Daremberg and Saglio, II, fig. 2623). This elephant, say the authors of the article in the *Bull. Corr. Hell.*, MM. E. Pottier and S. Reinach, is plainly of the Indian type, and they show conclusively that the soldier being trampled upon is a Galatian. From Tölken, *Verzeichniss d. ant. Steine* (1835), p. 402, No. 26, I quote a description of another representation: "Gelbe antike Paste. Ein Elephant trägt auf dem Rücken seinen Führer und eine Bürde, und am Halse eine Glocke; mit dem Rüssel umwindet er ein Bäumchen, um es auszureissen." (This gem belonged to the collection of Herr von Stosch, and is described as being in the Antiquarium of the Royal Museum at Berlin.) A copper coin found in Etruria and figured in Imhoof-Blumer and Keller's *Tier- und Pflanzenbilder auf Münzen und Gemmen*, pl. IV, No. 3, shows an elephant with a bell on his neck. T. E. Mionnet, *Description de Médailles antiques*, I, p. 103, No. 60, seems to describe a coin of this same type. He gives no illustration of it. He states that a certain mark which is seen between the legs of the elephant is a Phoenician character. When, however, this mark is consulted in a plate in Vol. VII of his work (plate XX, No. 48), it is found to be merely a crescent-shaped sign which might be almost anything. Imhoof-Blumer and Keller treat it merely as a crescent. The head of a Moor on the obverse of the coin, however, probably connects this elephant and his bell with Africa. Mionnet goes so far as to say that the coin was struck in Africa. In the *Catalogue des Bronzes ant. de la Bibl. Nationale*, pp. 680-682, a mina from Antioch, in Syria, is described. It is of bronze, square, 120 mm. ($4\frac{3}{4}$ in.) on a side, weighs 1069 grams (2.35 lbs.), and is perhaps of the year 57 B.C. Around it on one side runs this inscription: ΑΓΟΡΑΝΟ|ΜΟΥΝΤΩΝ|ΑΝΤΙΟΧΟΥ ΚΑΙ ΠΟΤΤΑΙΟΥ, and in the centre this: ΑΝΤΙΟΧΕΩΝ ΘΗΞ|ΜΗΤ[ΡΟΤΟ]ΛΕΩΞ ΚΑΙ|ΙΕΡΑΞ ΑΞΥΛΟΥ|ΚΑΙ ΑΥΤΟΝΟΜΟΥ. On the other side the

first inscription is repeated and we have in addition: ΕΤΟΥΞ|ΕΒΔΟ-
ΜΟΥ|ΔΗΜΟΞΙΑ|ΜΝΑ. In the centre on each side is an elephant
with a bell upon his neck. For this bronze see also A. de Longperier,
Oeuvres réunies, II, p. 211 f. In *Rev. Arch.* IX (1887), pl. X, on a
rectangular Roman coin, we find an elephant, perhaps with a bell.

So much for the evidence. What was the purpose of this custom?
Armandi dismisses the question by saying that ornaments rendered the
elephants 'fiers et joyeux.' The article in *Bull. Corr. Hell.* IX (1885),
pp. 485 ff., says the bell was to excite the elephant, and S. Reinach, in
his article *Elephas* in Daremberg and Saglio, *Dict. des Antiq.*, takes this
same view (Vol. II, p. 540 b), citing Plut. *Eum.* 14, to prove it. I find
nothing in that passage to justify this view. (For his statement that
bright-colored objects excited them he has good authority in Plut.
Conj. Praecepta, p. 144 E.) That little bells like these should have
been used with any intention of terrifying the enemy is almost prepos-
terous. The two most reasonable theories are these: (1) that this
bell has, like so many others, some superstitious significance; (2) that
its purpose is entirely practical, namely, to give warning to people of
the elephant's approach, that they may not be trampled upon. To
decide this point it would be of value to know from what country the
custom came. That the bells which M. Morillot has referred to Indian
customs are directly traceable to Africa, I have shown, but I have not
in this been attempting to argue against the possibility of their also
occurring upon animals coming from the East. Indeed, the cases cited
above from Myrina and Antioch probably have an Eastern origin, though
they are late enough to show signs of influence from the West. It
might be thought that there is a connection between the Caecilian
coins and a statement in Zonaras (*Ann.* 7, 21, Dindorf), where he
describes the triumph of M. Furius Camillus: καὶ κώδων ἀπήρτητο καὶ
μάστιξι τοῦ ἄρματος, ἐνδεικτικὰ τοῦ καὶ δυστυχῆσαι αὐτὸν δύνασθαι,
ὥστε καὶ αἰκισθῆναι ἢ καὶ δικαιωθῆναι θανεῖν. τοὺς γὰρ ἐπὶ τινι ἀτο-
πήματι καταδικασθέντας θανεῖν νενόμιστο κωδωνοφορεῖν, ἵνα μηδεὶς βαδί-
ζουσιν αὐτοῖς ἐγχριπτόμενος μιάσματος ἀναμίμπληται. It might be held
that these Caecilian coins point back not so much to a general custom
of placing bells on the necks of elephants, as to such a custom in time
of a triumph, for all these coins refer, not so much to the victory of
Metellus, as to his formal triumph. But this explanation gives no solu-

tion of the question of the Antioch and Myrina elephants, which surely can have had no connection with any Roman triumph, and the occurrence of this custom in places as widely separated as Rome (Carthage?), Syria, and Ceylon (see M. Morillot, pp. 47-48) leads me to believe that the purpose of this bell is merely the practical one I have stated. If it be objected that elephants used in war were *intended* to trample upon the enemy, and that it would therefore be absurd to have their approach thus advertised, two answers may readily be given: (1) that the approach of a *crowd* of elephants would surely be known by the enemy, even if there were no bells to apprise them of the fact, while single elephants, accidentally let loose and wandering about their own camp, might easily do damage if no warning was given of their approach; (2) that the elephants were not intended merely to trample upon single soldiers of the enemy, but rather to break through whole lines, where escape would be difficult or impossible, and to throw whole squadrons into disorder. In the light, then, of what evidence we at present have, I see no satisfactory explanation for this custom along any other lines than those of practical utility.

A *spathalium* (see M. Morillot, pp. 23-24) is described by P. de Cessac in *Rev. Arch.*, 1874, 2, pl. XXVII, pp. 348 ff. In a tomb of the first or second century of our era, at Védignac, commune of Ars, was found a bracelet of solid gold, made of wire joined at the ends by repeated windings (for this form of bracelet see G. de Mortillet in *Rev. Arch.*, 1866, 2, pp. 417 ff.). The diameter of the bracelet is .046 m. ($1\frac{3}{4}$ in.), its small size being due to the fact that the tomb is that of a small infant. To the bracelet is attached an oval ring .015 m. ($\frac{5}{8}$ in.) long and .012 m. ($\frac{1}{2}$ in.) wide, to which, by a somewhat strap-shaped ring, the bell is fastened. It has straight vertical sides, and its diameter is .016 m. ($1\frac{1}{8}$ in.). At its top is a dome-shaped protuberance from which springs the ring, uniting it to the next larger ring. Its height is .011 m. ($\frac{7}{16}$ in.). The tongue is of silver and projects a good deal below the body of the bell. "Les côtés de cette clochette semblent avoir été rebattus au marteau, car tout son pourtour porte les marques de cet outil." This bell was found in 1874.

At Alfadena was found on October 17, 1877, in a tomb, upon the breast of a skeleton, "un ornamento di ferro, di due campanuli a cono allungato e terminati in anello, e i due anelli ricongiunto da un terzo

anello mobile." (*Not. d. Sc.*, 1877, p. 278.) And on October 19, 1877, in another tomb, at the same place, "tra le osse dello scheletro erano quattro fibule, due campanuli di ferro tenuti insieme da un anello mobile." (*Not. d. Sc.*, l. c.) Froehner, *Cat. des Ant. grecques et romaines du Mus. de Marseille* (Paris, 1897), No. 866, mentions seven bells, "ayant servi de pendants de colliers." In the *Rev. Arch.*, 1877, 1, p. 4, G. C. Ceccaldi describes as coming from a tomb at Curium, in Cyprus, "Pendeloques de cou (amulettes) consistant en . . . orbite en or d'un oeil qui devait être en émail ou en pierre et qui n'existe plus. Trois chaînettes y sont appendues, à chacune attiennent deux clochettes coniques et goderonnées." It is very likely that some of the rings, which have been found joined loosely to other rings, may have been originally intended to support bracelet or necklace bells.

Examples of bells used upon tympana will be found in Zahn, *Ornements de Pompei, d'Hercul., et de Stab.*, II, pl. 17; III, 64. See also references in F. Wieseler, *Das Satyrspiel*, p. 108, foot-note.

M. Morillot's discussion of the bells used in camps (pp. 25 ff.) shows a failure to note an important distinction between two very different customs. The first, and apparently the more common, custom was as follows: a watchman, or patrol, made the rounds of the camp, ringing a bell, and the sentries replied to him by shouting or in some other way. If they did not reply, he suspected that they were asleep and investigated the matter. Ar. *Av.* 841-2 (and schol.), 1160-62; Plut. *Arat.* 7; Harpocr. s.v. *διεκωδώνισε*. Also Hesych. s.vv. *κωδωνίσαι*, *κωδωνοφορῶν*, and Phot. s.v. *κωδωνοφορῶν*. The second custom was for a bell to be sent around the circuit of the camp, each patrolman carrying it over his beat and delivering it to the next patrol, till it made the rounds and came back to the commander. If any patrolman, through sleepiness or absence from his beat, failed to appear to take the bell from his neighbor, the bell was sent back again in the same fashion to the commander, who at once inquired into the reason for the patrolman's failure to appear. See Thuc. 4, 135, and G. Boehme and S. Widmann on the passage. In this custom the bell was hardly different from any other symbol. In fact, a *σκυταλὶς* was sometimes used in the same way (Aen. Tact. 22, 27). The scholium on Ar. *Av.* 1160 mentions the use of the bell in watches, but does not state which custom is meant. However, as the passage on which it is a scholium seems to refer to the first method, it is probable that the scholium does also.

On pp. 33-34, M. Morillot refers to a bell bearing the inscription :

TOI COM MAC IN 𐀓
VITO TET AΓM AI 𐀓

(i. e. τοῖς ὄμμασιν ὑποτέταγμαi). For a discussion of this bell see the *Annali* for 1875, pp. 50 ff.; also *Arch. Zeit.* XXXIII (1876), pp. 55-6; Kaibel, *Insc. Gr. Sic. et Ital.*, No. 2409.5; Bruzza, in *Comment. Phil. in hon. Theod. Mommseni*, pp. 555 ff. The little palm branches which appear at the ends of the two lines of the inscription are believed by Bruzza to have been not without a prophylactic significance. There seems to be no parallel for the use of the verb ὑποτέταγμαi in this inscription.

In addition to this inscribed bell of the *Annali* of 1875, in the article by Bruzza in *Comment. Philol. in hon. Theod. Mommseni*, pp. 555 ff., other such bells are described. One published by O. Bocchi (*Saggi di Dissert. dell' Acad. di Cortona*, III, pl. XI, p. 84, a book I have been unable to find) is really not a helmet, as was once thought, but a hemispherical bell. It bears the inscription :

EYTYXHC O ΦOPWN

A similar inscription upon a cameo is quoted by Bruzza : εὐτυχῶς ὁ φορῶν ζήσης πολλοῖς χρόνοις. This bell came from Adria. A bell in the collection of Dr. Henzen, from an unknown source, has inscribed in two lines :

𐀓 ΕΙCΑΤΤΕWN
ΝΕΟΦΥΤ ΝΕΙΚΑ (ΝΕΟΦΥΤ = Νεόφυτον)

And another (= Brunati, *Mus. Kirch.*, p. 48; Garrucci, *Graffiti di Pompei*, p. 41) has this :

𐀓 ΕΙCΑΤΤΕWN
𐀓 ΤΡPWΤΟΓΕΝΗΝΙΚΑ

The marks at the beginning of the lines are palm branches, such as appear on the τοῖς ὄμμασιν ὑποτέταγμαi bell described above. Bruzza advances the interesting theory that these last two bells bearing the names of Εἰσαπέων and others were amulets, not for the drivers of race horses, but for the horses themselves, and that the proper names are those of the horses. (See p. 36 of this article for amulet bells on horses.)

Since the victory is sought over but one competitor, he thinks that these are not intended for horses driven in *bigae* or *quadrigae*, but for those driven singly by *desultores* or *culetes*. It is to be noted that the two bells mentioned by Morillot (pp. 38–39) were found in a tomb. The places of discovery of these other three bells I have not been able to ascertain. All five bells might have been intended for horses to wear (even, I think, the one inscribed ΕΥΤΥΧΗC Ο ΦΟΡΩΝ). That they could not all have been worn by drivers seems by no means certain, though the real victory would of course be that of the horses rather than that of the jockeys. For these bells see also Kaibel, *Insc. Gr. Sic. et Ital.*, No. 2409.1 ff.

On p. 43 Morillot raises the question whether the instrument rung by the priest of the Syria Dea (Luc. *Syr. Dea*, 29), at his post upon the phallus-shaped pillar, was a real bell or some sort of a gong. The phrase τὸ αἰδεῖ μέγα καὶ τρηχὺ κινεόμενον points to some resonant instrument, but the description ποίημα χάλκεον is very ambiguous. If this had been a bell proper we might have expected it to be called κώδων or perhaps χαλκίον. The vagueness of the ποίημα may indicate either that Lucian did not know just what it was, or that it was neither a bell nor a gong but something a little different, for which there was in Greek no precise name. One difficulty rests in κροτέει, which may be interpreted either as 'strike' or as 'rattle' (as is seen in the deriv. κρόταλα). M. Morillot's belief that this was a bell-shaped vessel without a tongue (i. e. a λέβης) may perhaps derive some support from Hdt. 6, 58, where the phrase λέβητα κροτέουσι occurs. But whether we understand this instrument to have been a κώδων or a λέβης or some other sort of resonant bronze vessel probably makes little difference in the question of its purpose in the ceremony. It was used, I believe, to call the attention of those present to the prayer, that they might utter no words of ill-omen, or perhaps to drown out any such words that might by chance be spoken. The purpose of the bell rung at the elevation of the Host in the service of the Catholic church probably presents a parallel to this usage.

On p. 48 M. Morillot says: "Apollodore dit qu'à Athènes l'hierophante ou prêtre de Proserpine avait coutume d'agiter un ἡχείον: nous avons dit, à propos des théâtres, ce que désignait ce mot." Now, if the ἡχείον is the jar without a tongue described on p. 11 of M.

Morillot's work as having been used in theatres to increase the sound, it would not have made any noise at all by being shaken ('agiter'), but would have had to be struck, which, in fact, is indicated by the Greek verb *ἐπικρούειν* used in the passage (Apollod. *Fr.*, p. 402, Heyne, from Schol. ad Theocr. 2, 36). It seems, then, to have been some sort of *λέβης*.

Morillot gives a short discussion (beginning on p. 48) of bells in connection with death and burial. A use of the *λέβης* which he does not mention is that at Sparta, when a king died, women went through the city striking a *λέβης*. This, says Herodotus, was a signal that from each household a man and a woman should put on mourning (Hdt. 6, 58; Apollod., *l. c.*). This use appears to have been a practical one in the main, though there may have been superstitious reasons for choosing the bell rather than any other instrument.

Morillot gives few references to bells found in tombs. I add a list of some of which I have found descriptions or mention.

Notizie degli Scavi:

- 1876, pp. 106 (Bologna), 135 (Siena), 247 (Bologna);
- 1877, pp. 7 (between Narni and il Castello di Capitone), 107 (Bologna), 278 (Alfadena);
- 1881, pp. 42 (Isola della Scala), 182 (Carignano — a bronze bell 12 cm. (4½ in.) high and 5 cm. (2 in.) wide at the mouth).

Zannoni, *Scavi della Certosa di Bologna* (Bologna, 1876), p. 137 and pl. LXXXIX (Bologna).

Annali:

- 1829, p. 204 (Volterra);
- 1878, p. 82 (Chiusi, along the Via Cassia in a late Roman tomb, a bell on the neck of a skeleton).

Répertoire Arch. de la France, Dept. de la Seine-Inférieure:

- Column 112, from a Gallo-Roman cemetery at Les Loges, near Havre (1851), a bronze bell, now at Museum of Rouen.
- Column 349, in Canton de Pavilly, at Parentin à la Torterelle, in a grave (June, 1858) was found an iron bell of S. 1/II of our era.

Revue Archéologique:

- 1859-60, p. 714. A small bronze bell from tomb at Beaubec-le-Rosière (arrondissement de Neufchâtel). Others from Neuville-la-Pollet (in 1845) and Vèrinne, near Melle, in les Deux-Sèvres.
- 1876, 1, p. 225. From tombs at Olympia, arms of bronze, various instruments, bells, Greek and Roman coins and pottery.

See also, F. Wieseler, *Das Satyrspiel*, p. 108, foot-note; O. Jahn, in *Annali*, 1857, p. 125.

Why were bells thus placed in tombs? M. Morillot says that it was done in order to please their former owners even after death, but this seems an inadequate explanation of the large numbers of *evident amulets* of one sort and another which have been found in tombs. Bruzza (*Annali*, 1881, p. 291) says that the inscriptions ΕΥΤΑΟΙ and ΤΡΕΤΙΟΙ show that the bells on which they occur were placed in tombs for superstitious reasons. This is hardly a sound inference (it seems to me), for though they were doubtless placed there for some superstitious use, yet *these inscriptions* seem to refer rather to a horse-race or some such contest, and to have been inscribed with that in mind, and only later, when the owner died, placed in a tomb. Again, to suppose that these objects had some connection with the occupation of the deceased is difficult, for with very few occupations would bells be naturally associated, and in almost none of these would they be the most significant symbol that might be chosen. Now, if one less significant from the point of view of the occupation were selected, it would be probable that there was some emphasis laid upon the bell as an amulet. That these bells were amulets worn by the person in his lifetime it is in many cases absurd to suppose. How could the 38 bells (large enough to be bells used on horses) cited above from the *Compte Rendu* of 1865 be thus explained? Or the bell, 4 $\frac{3}{4}$ inches high, from a tomb at Isola della Scala (*Not. d. Sc.*, 1881, p. 42)? I believe that we must, as a general rule, regard these bells as having been used either for practical or for superstitious uses during their owners' lifetime, but to have been more or less indiscriminately appropriated for a superstitious significance when placed in tombs. I say more or less indiscriminately, for if there had been any principle in their selection, why do we not find a greater approach to uniformity among them, and, still more, if they were made to be used in tombs, why was such a splendid opportunity lost for inscribing upon some of these bells phrases of good omen which should have distinct reference to their use *in connection with the dead*? Bruzza believed (*Comm. Phil. in hon. Theod. Mommseni*, p. 559) that the mere shape of the bell, apart from its sound, had a prophylactic influence. This idea he seems to support by no evidence, except, perhaps, by the fact that so many bells without tongues are

found. (But the tongues might easily have disappeared, as we know that in many cases they have done, by the oxidation of the rings or fastenings that held them in.) We may, however, add the argument that any influence such bells could have had while remaining motionless in tombs must have come from their form and not from any sound, and also the argument that the other amulets found in company with bells in tombs (nuts, figs, and other such shapes) must have depended for their efficacy chiefly upon their shape.

I believe, then, that the bells we find in tombs were made for various purposes, practical or superstitious, and placed in tombs as a protection for the deceased against evil influences from without. To determine what these influences were and what results they would produce, in case they were not thwarted by amulets, I am at present unable.

I shall at this point in the discussion venture to point out an interesting association of these objects designed to protect the tomb or its occupant with a deity who had the same function assigned to him.

The bell mentioned by M. Morillot, on pp. 61-62 (from the Mus. Kircheri), bears this inscription, according to Montfaucon, *Antiq. Expliq.* III, p. 106, pl. 55 :

CHOVS ARTEMIS EPHISTION AIR MENI

That this is an attempt to represent in Latin characters Greek words is evident. The meaning is difficult. P. Bonanni is said by Montfaucon to interpret the first four words as referring to the four elements, earth, water, fire, and air. This is hard to believe, because EPHISTION (= Ἐφαιστίων) as equivalent of Ἡφαίστος seems unparalleled. Nor is such a mixture of names of gods with names of elements unfiguratively used a natural one. Moreover, MENI, which is taken to mean μένει, would, in the singular, make no sense in this connection. M. Morillot makes CHOVS and AIR refer to Athene and Tyche, but this is open to the same objections. Bruzza (*Comm. Phil. in hon. Theod. Mommseni*, p. 555) says that EPHISTION refers, not to Hephaestus, but to a friend of Alexander the Great, deified and worshipped by him (*Luc. de Calumn.* 17). But this gives us no help. To give a satisfactory explanation of all the words I am as yet unable, but some suggestions may point to a correct interpretation. If we take MENI as equivalent, not to μένει, but to Μηνί, the deity corresponding to the Latin god

Lunus, we get a new starting point. In a number of inscriptions we find Μῆν associated with Artemis Anaitis. (For references see J. H. Wright, *Harv. Stud. in Class. Phil.* VI, pp. 55-74, where he describes a votive tablet to Artemis Anaitis and Mên Tiamu in the Boston Museum of Fine Arts.) The god Mên was also conceived of as the protector of sepulchres. For this there are a number of pieces of evidence, among which these may be noted: J. S. Sterrett, *Papers of Am. Sch. of Class. Stud. at Athens*, III (1884-5), p. 174, No. 284:

[Ἡ δέινα] Ἀραμόσον ἐαντῇ καὶ ἀνδρὶ μνήμης χάριν ἐν[ο]
 ρκίζόμεθα δὲ] Μῆνα καταχθόνιον εἰς τοῦτο μνημεῖον μῆ|
 δένα εἰσελθεῖν

Cf. *op. cit.*, p. 146, No. 251. Also *Bull. Cor. Hell.* X (1886), p. 503, an inscription from Iconium:

[γν]-
 γαικί . . . [μνή]-
 μης χάριν.
 Ἐάν τις τὴν στήλην
 ἀδικήσῃ, χεχολω-
 μένον ἔχοιτο
 Μῆνα καταχθό-
 νιον

(For ἔχοιτο it has been suggested that we read ἔχοι τὸν.)

Having shown the connection of Mên with tombs, I shall now suggest that the inscription in hand be divided differently from Montfaucon's arrangement. (This we are free to do as it runs in a line around the bell, if we may judge from his illustration of it.) We should read, then,

MENI CHOVS ARTEMIS EPHISTION AIR

χοῦς is then brought next to Μηνί. And with it, I believe, it should be joined, for it means 'heaped up earth.' The noun χῶμα, with a similar original meaning, comes to mean a 'sepulchral mound,' and Hesychius explains χοί by χῶματι. (The statement, however, made by lexicons that χοῦς in the LXX. means 'tomb,' is incorrect and is due to a misunderstanding of a gloss of Suidas.) The five words of our inscription, I believe, constitute more than one clause, and to fill out the first clause MENI CHOVS we might supply such a word as μέλει,

or, if this be a wish, *μέλαι*. To fill out the second clause, in which Artemis is to occupy a position corresponding to that of Mên in the first clause, I am unable, because I do not know the meaning of EPHISTION. But the coincidence of Mên and Artemis, elsewhere associated, upon this one bell, and the striking fact that Mên is a protector of tombs, and that we constantly find bells used in connection with tombs, seems to leave little doubt that the true explanation of this bell is to be sought along this line of argument.

It is of interest here to mention a bell described by Caylus, *Rec.* VII, p. 203 and pl. LII, 5. This bell hangs on a ring which is surmounted by a bust of Lunus, the points of his crescent appearing above his shoulders. The tongue is still in place. (Total height a little over three inches, that of the bell being about one inch.)

For bells upon ithyphallic objects, some of them grotesque animal combinations, see Barré and Roux, *Musée Secret*, plates 46, 47, 51, 52. From each of these figures are suspended by long chains and rings two or more bells, sometimes round-conic, sometimes of a conic type with a square base and round knobs at the four corners of the base. Pl. 49 shows an object which has four holes, presumably for the attachment of four bell-chains. These objects are intended to be themselves suspended by chains, and I believe that they are similar in purpose to the Mercury figures, of which a description follows in M. Morillot (pp. 52-3), and were probably intended to be hung up in some holy place. Though all these objects are so large as to make it rather certain that they were not intended to be worn (one Mercury is $13\frac{1}{8}$ in. high), they are yet so small that they would have been insignificant ornaments for a temple. Though it is not absolutely certain that they may not be *ex voto* offerings for temples, it seems to me likely that they were suspended in houses, perhaps in *lararia*.

The Mercuries described by M. Morillot are two in number. The first (which, in addition to R. Mowat's article in the *Gaz. Arch.*, 1883, is also described in Babelon: *Bronzes antiques de la Bibliothèque Nationale*, pp. 159-160) comes from Orange. It is $13\frac{1}{8}$ inches high. The second comes probably from Vienne, in Dauphiné. It is .13 m. ($5\frac{1}{8}$ in.) high. Another analogous bronze will be found in *Collection Auguste Dutuit, Bronzes antiques*, Series I (Paris, 1897), p. 26 and pl. XXXVII, showing Mercury with a winged *petasus*, in which is a ring

for the support of the image, and a cornucopia upon each shoulder. Suspended around the breast are 5 square-based bells, tongueless, and of various sizes. The total height of the object is .23 m. (9 $\frac{1}{16}$ in.). Another similar Mercury is figured in Lorenz Beger, *Thesauri Regii et Electoralis Brandenburgici* (1696), III, p. 234, and described in K. Friederichs, *Berlins antike Bildwerke (Kleinere Kunst und Industrie im Alterthum, 1871)*, p. 390, No. 1833 a, from which I quote: "Schöne Büste des Merkur, der Petasus war beflügelt, aber der eine Flügel ist aus- der andere fast ganz abgebrochen. Oben aus dem Petasus springt ein Schwanenkopf hervor, der sich so anbiegt, dass ein Ohr entsteht. Die Brust wird begränzt durch zwei Akanthusranken, aus denen rechts und links an jeder Schulter ein Füllhorn heraustritt, ein Motiv, das in Bronzen und namentlich in Gemmen nicht selten ist und oft nur formelle Bedeutung hat, hier aber doch auch materielle an seinem Platze ist, da das Füllhorn zu den zwar selteneren aber doch selbstverständlichen Attributen des Merkur gehört. Hinter bemerkt man je zwei Oesen, mit welchen die Büste an einem Geräth befestigt war. In die durch den Schwanenkopf gebildete Oeffnung kann ein Henkel eingegriffen haben. Aus dem Besitz Bellori's." Nothing is here stated as to the source of this Mercury. The two former ones, however, were both Gallo-Roman, and this also may well have been. Caesar speaks (*B. G.* 6, 17) of the worship of Mercury in Gaul: Deum maxime Mercurium colunt. Huius sunt plurima simulacra, hunc omnium inventorem artium ferunt, hunc viarum atque iterum ducem, hunc ad quaestus pecuniae mercaturasque habere vim maximam arbitrantur. Post hunc Apollinem et Martem et Iovem et Minervam, etc. (Cf. Tac. *Germ.* 9, for the German worship of Mercury.) In Barré and Roux, *Musée Secret*, pl. 46, we have a phallic caricature of Mercury, intended to be suspended, with seven bells hanging from various parts of his figure. This is, of course, an entirely different conception of the god from the dignified one I have just been describing, but it shows the association of bells with Mercury. Other cases in which the bell and the phallus are associated are these: *Compte Rendu*, 1868, p. 152, where we find a bronze ithyphallic herm of Priapus, holding in his outstretched right hand a bell. Also Caylus, *Recueil*, IV, p. 230, pl. LXXII, 4 and 5, a figure (of doubtful antiquity) of a man with strangely dressed hair standing half-naked upon a pedestal, holding in his outstretched

left hand a bell. Again, Ménard, *Histoire des Antiquités de la Ville de Nîmes et de ses environs* (Nîmes, 1832), pl. opp. p. 93, No. 4: the trunk, hind legs, and tail of a winged animal from whose extended phallus hangs a bell (cf. with this Barré and Roux, *Musée Secret*, pl. 52). Another case of the connection of the bell with phallic rites is found in *C. I. L.* II, 4963, 8. I quote the entire description: "Tessera plumbea rotunda duobus exemplis servata, altero Lucenae reperto et servato apud Garciam de la Torre olim, nunc Matrili in bibliotheca publica, altero Hispali apud Eduardum Sanchez. Litterae sunt liberae rei publicae. In antica: iuvenis nudus, monile tantum ex margaritis in colle habens, currens et ex vasculo quod manibus ambabus tenet liquorem in solum effundens; ante eum phallus alatus (qui deest in ex. Hisp.) ad pedes scopae; adscriptum utrinque:

Q · CO

I I · Q

et sub eo intra quadratum

IVSO

Marginem cingit corona laurea cum bacis. In postica: femina nuda currens, s. tenens tintinnabulum, dextro humero impositum gerens baculum supra largiorem gubernaculi instar; adscriptum est utrinque:

r

s

et in baculi parte superiore (in solo ex. Matr.):

FRVM

Marginem cingit corona laurea sine bacis." See also a less detailed description in *C. I. L.* I, 1559. The name is perhaps Q. COILI(VS) Q (· FILIVS). As to the meaning of these tesserae I have nothing to suggest, unless it be that they perhaps represent some custom in the worship of Bacchus.

In the *Catalogue of Bronzes of the British Museum*, No. 318, is mentioned a bell dedicated to the Cabiri. It is $2\frac{1}{2}$ inches high, and was found at their temple in Thebes. It has a ring at the top. The tongue is lost. Around the bell, in punctured characters, runs the inscription:

ΤΥΡΙΑΞ ΚΑΒΙΡΩΙ ΚΑΙ ΓΑΙΔΙ

On p. 55 M. Morillot speaks of a relief in the Louvre showing trees adorned by bells. He gives no reference to any publication upon the

subject. Some such objects which I have found illustrated seem to resemble bells, but others are much flatter and suggest cymbals. For instance, in Barré and Roux, *Musée Secret*, pl. 27, 1, we see two flattish disks hanging from a tree. Many of these objects are shown in Bötticher, *Baumkultus* (figs. 5, 7, 11, 13, 14, 17, 19 — mostly taken from De Clarac, *Musée de Sculpture* (Louvre)). They vary in shape from campaniform to flat. Some are merely plate-shaped disks with a large round hole in the centre, through which are inserted the strings by which they are hung. They appear in connection with the worship of Cybele, Bacchus, Silvanus (fig. 17 in the *Baumkultus*), and an uncertain female divinity (*Monuments et Mémoires*, V, p. 181, fig. 44, of a lamp in the old Barone collection, coming from the region of Bosco Reale, near Pompei). Similar bells upon a pillar are shown in *Museo Borbonico*, II, pl. LIX (= Baumeister, *Denk.*, pl. 1932 = pl. 2390), in a scene representing Hera visiting Zeus upon Mt. Ida, a mountain noted for the worship of Cybele (Verg. *Aen.* 3, 111–113). That these objects are really bells I cannot believe, for the pictures I have cited show a gradation from the campaniform to the flat shape, and the best reproductions do not show the tongues which appear in some of the poorer drawings. Moreover, the fact that they in every case appear, not singly or in odd numbers, but always in pairs, and with the two members of the pair usually suspended upon the two ends of the same cord, is a strong argument in favor of the theory that they are cymbals.

A bell with a Latin inscription is mentioned in Bruzza, *Comm. Phil. in hon. Theod. Mommseni*, p. 560. It belonged to Sig. Luigi Costa and came either from the Esquiline or from the Monte della Giustizia. It is of bronze, round, 35 mm. (1 $\frac{3}{8}$ in.) high, and has a ring at its top. The inscription it bears is this:

F · C · IVLDOMAXIMO · N · C

This Bruzza believes to be a mistake for F · C · IVLIO · MAXIMO · N · C.

The F and the N · C are new and unknown signs. The bell, according to Bruzza, was probably intended to be hung in a *lararium* — a custom practised with various other articles upon the birthdays of members, friends, or dependents of the family. The proposed interpretation is: "Feliciter Caio Iulio Maximo Natalia Centum," a formula said to be much used to-day in Southern Italy.

Another bell with a Latin inscription is to be found described by E. Hübner in the *Ephemeris Epigraphica*, VIII (1899), pp. 447-8. It is a bronze bell, found at Tarraco, 12 cm. ($4\frac{3}{4}$ in.) high and 45 cm. ($17\frac{3}{4}$ in.) in circumference. Its tongue still exists. Around the bell runs a second century inscription :

CACABVLVS S SACRIS S AVGVSTIS S VERNACLVS · NVNTIVS S MAIOR S
SECVLVM · BONVM S S · P · Q · R · ET · POPVLO S ROMANO S FELIX · TARRACO S

This seems to be the earliest mention of the word *cacabulus*, the diminutive of *cacabus*, 'pot.' Here it apparently means 'bell,' and from it are thought to come the Span. '*cascabel*'; Pg. '*cascavel*'; old Prov. '*cascavel*'; later Prov. '*cascaveu*.' The use of λέβης, 'pot,' in Greek is somewhat comparable to this. This bell has to do with the worship of the emperor (*sacris Augustis*). No satisfactory explanation has been proposed for the words *vernaclus nuntius maior*. The *et Populo Romano* after *S · P · Q · R ·* is plainly a repetition. How this bell was to be used in the religious ceremonies is not clear, but I believe that it may perhaps have been rung just before or even during the prayer to attract the attention of the people and prevent words of ill-omen in a manner analogous, perhaps, to the instrument used by the φαλλοβάτης of the Syria Dea, despite the fact that Hübner thinks it is too small to have been so used.

To attempt to give a full treatment of the uses of bells in the worship of Dionysus would exceed the limits of this paper. An article by O. Jahn, in *Annali*, 1857, p. 125, gives a useful collection of material upon the subject. A few points, however, I may mention. Strabo, 15, p. 712, says: Διονυσιακὸν δὲ καὶ τὸ σινδονοφορεῖν καὶ τὸ μιτροῦσθαι καὶ μυροῦσθαι καὶ βάπτεσθαι ἄνθρα καὶ τοὺς βασιλέας κωδωνοφορεῖσθαι καὶ τυμπανίζεσθαι κατὰ τοὺς ἐξόδους. In Ovid, *Metam.* 4, 391-3, *tinnula aera* are mentioned in connection with the transformation of the Minyides into bats for their disregard of the worship of Dionysus. In figures in Wieseler's *Denkmäler* (XLII, 522; XLIII, 539) bells are shown in Bacchic scenes. In the *Monumenta Matthaeiana* (Rome, 1779), I, pl. XIII, and pp. 10-11, Bacchus is shown riding upon an ass wearing a bell. The bell attached to the *thyrsus* seems to have been not infrequent. On coins, in the *British Museum Catalogue*, XIII, p. 17 f., Nos. 50-58, from Amisus, in Pontus,

of the time of Mithridates Eupator (B.C. 121–63), we see on the obverse the head of Dionysus, on the reverse, among such Dionysiac symbols as the *cista mystica*, a *thyrsus* with a fillet and a bell. See also Wieseler, *Denkmäler*, II, pl. XXXVIII, fig. 442 (= Baumeister, *Denk.*, 919), and Inghirami, *Monum. Etrusc.* IX, pl. K, fig. 5 (= S. Reinach, *Peintures des Vases antiques recueillis par Millin et Millingen* (1891), p. 93), a vase, in the Museum of Naples, showing on one side Lycurgus, on the other Dionysus seated, holding a *thyrsus*. At his right is a female figure, perhaps a Maenad, with a *patera* and a *thyrsus* from which hangs a bell. She is preparing to pour a libation into a large *crater*. Behind Dionysus is a Bacchante with a *tympanon*, at his right a satyr with a *thyrsus*. A bibliography of this vase is given by Reinach. Fabretti, *Inscr.*, p. 425, gives the monument of a young boy who had died early in the service of Dionysus. In the upper left-hand corner of the inscription a bell seems to be indicated.

That noisy instruments were used in the worship of Cybele is well known. Aelian, *V. H.* 9, 8, speaks of someone as *μητραγυρῶν καὶ κρούων τύμπανα*. A fragment of Lucilius is preserved in Nonius (p. 490, 23, Müller, under the heading *olerorum pro olerum*, = Lucil. 15, 438, Lachmann): “tintinnabulum abest hinc surpiculique holerorum.” On which Lachmann remarks: “Instrumentum, nisi fallor, gallorum, nam τίς οὐκ ἀπαρχὰς ὀσπρίων τε καὶ σίτων ἀγνῶ φέρων δίδωσι τυμπάνῳ Ῥείης; (Babr. 126, 8). Pindar (*Fr.* 79, Bergk) speaks of the *κύμβαλα* and *κρόταλα* in connection with the worship of Cybele.

An inscribed bell, which is plainly a sham, is to be found in Muratori, *Novus Thesaurus Veterum Inscriptionum* (Milan, 1742), 1989, 6. The inscription reads TINTINABVLVM (*sic*) and MAGNO SACERDOTI. In addition to this the bell is adorned with many symbols, arranged in a most improbable fashion, but in a way that might easily have imposed upon the unlearned.

Of M. Morillot's lengthy discussion of the bells upon the robe of the Jewish High Priest I cannot enter upon any criticism, for lack of knowledge of Semitic antiquities. I shall, therefore, append at this point some mention of a few customs which M. Morillot has overlooked.

In Sext. Empir. *adv. Math.* 8, 193, we find these words: ὁ γὰρ ἀνατεινόμενος πυρσός τισι πολεμίων ἔφοδον σημαίνει, τισὶ δὲ φίλων ἀφίξιν δηλοῖ. καὶ ὁ τοῦ κώδωνος ψόφος οἷς μὲν ὄψου πράσεώς ἐστιν,

οἷς δὲ τοῦ δειν ραίνειν τὰς ὁδοὺς. To show that the custom of sprinkling dust was not unknown among the Romans, I. A. Fabricius, in his note on this passage, cites Suet. *Calig.* 43, and Phaedr. 2, 5. In both of these places the custom is spoken of as though it were something of a luxury, but by the time of Sextus Empiricus it may have become more usual. The passage may imply that the streets had to be sprinkled by the abutters. Whether they did it, or it was done by a special set of workmen, the time for sprinkling was indicated by the ringing of a bell.

A curious use of the bell or some similar instrument is reported by Varro (*R. R.* 3, 16, 29–30) who, having remarked that when bees were swarming some of them gathered outside the hive and buzzed loudly, waiting for the others to come and join them, continues: "A mellario cum id fecisse sunt animadversae, iaciundo in eas pulvere et circumtinniendo aere perterritae, quo volunt perducere, non longe oblinunt erithace (just what this was is uncertain) atque apiastro ceterisque rebus quibus delectantur." Cf. Verg. *Georg.* 4, 149 sqq., and Plin. *H. N.* 11, 20, § 68: "Gaudent plausu atque tinnitu aeris, eoque convocantur."

The custom of testing the spirit of horses, by seeing whether they were frightened by the sound of bells, is mentioned in several places. Hesych. *s.v.* κωδωνοφορῶν. φασὶ δὲ καὶ τοὺς ἵππους τοῖς κώδωσιν ἐξετάζεσθαι. Cf. also *Et. Mag.*, p. 267, *s.v.* διακωδωνισθέντες. εἰώθασιν γὰρ οὕτω δοκιμάζειν τοὺς γενναίους ἵππους, εἰ μὴ καταπλήσσονται τὸν ἐν τῷ πολέμῳ θόρυβον, τοὺς κώδωνας ψοφοῦντες. Fighting quails were also tested in the same fashion. Hesych., *l. c.*, ἀπὸ δὲ τῶν ὀρνύγων ἡ κρίσις. τοὺς γὰρ ὑπομείναντας τοῦ κώδωνός φασιν ἐπιτηδείως ἔχειν πρὸς μάχην. Cf. Harpocr. *s.v.* διεκωδώνισε. From these customs arose the figurative use of κωδωνίζω and its compounds — *Et. Mag.* 325, 21 = ἐκωδωνίζοντο (from Lysias); see also Ar. *Ran.* 79, 724; *Lysist.* 485; *Fr.* 288, Dind., preserved in Poll. 10, 173. The ἐκκωδωνισθῆναι of Athen., p. 219 B, seems, however, to have the meaning 'bruit abroad.'

Velleius Paterculus, 1, 4, 1, speaks of the fleet which carried the founders of Cumae: "Huius classis cursum esse directum alii columbae antecedentis volatu ferunt, alii nocturno aeris sono, qualis Cerealibus sacris cieri solet." If this *aeris* really means 'bell,' which is far from certain, the whole account is so mythical that we can put no confidence in it.

An illustration which has been variously explained is that found in the following places: Millingen, *Anc. uned. Mon.* I, pl. 1-3; *Brit. Mus. Cat.* II, B, 130; Inghirami, *Monum. Etruschi*, VII, pp. 364 f., pl. XXXIV. It is on an *amphora* found at Athens in 1813 and now in the British Museum. A man in a chariot is driving two prancing horses; with his right hand he seems to be holding the reins, with his left he holds a long rod, the end of which is crooked into a spiral and has two small, lozenge-shaped objects hanging from it. Inghirami thinks they were of metal and designed by their sound to increase the spirit of the horses, and S. Reinach, *Répertoire des Vases peints grecs et étrusques*, I, p. 214, No. 5, goes so far as to call them bells. The shape, however, is not like that of any bells I have seen pictured, and I think it more likely that the whole thing is a whip of some kind, perhaps with tassels on the end, or perhaps with small metal objects to increase the effectiveness of its stroke. (It is hardly probable that these are the bells described in the process I have discussed, called *κωδωνίζεον*!)

The bell appears a few times upon coins as a symbol whose significance I have not discovered. E. g. in the *Brit. Mus. Cat. of Coins*, Nos. 4 sqq., of Patraos, in Paeonia, show on the obverse Apollo, on the reverse a prancing horse, and behind him, as a mere emblem in the field, a bell. These coins date from about 340-315 B.C. Again, on a silver coin of Parium, in Mysia (B.C. 400-300 or later), in *B. M. Cat.*, Parium, No. 18, is shown on the obverse the Gorgon's head, on the reverse a bull looking backward, and above him a bell. A coin of Catana (*B. M. Cat.*, Catana, No. 35 = Gerhard in *Arch. Zeit.*, 1854, pp. 250 f., and pl. LXIX, 7) shows on one side a crowned head, and in front of it what has been variously understood as a string of bells, or a knotted fillet with a bell on the end. Others, however, believe that it represents a knotted fillet with a tassel upon the end, and to this view I incline.

Many bells have been found concerning the use of which we cannot decide for want of evidence. As I have come across a considerable number of references to such bells in the course of my investigation, I append a list of them. Descriptions of the sizes, shapes, and places of discovery of the bells may be found by consulting the passages cited, but little, I think, which can cast light upon their uses.

Montfaucon, *Ant. Expliq.*: III, pl. 55.

Ceci, *Piccoli Bronzi del Museo Naz. di Napoli*: pl. IX, Nos. 21-25.

J. Smetus, *Antiquitates Neomagenses* (1678): pp. 120, 154.

Cat. des Bronzes antiq. de la Bibliothèque Nationale: p. 638, Nos. 1859-1864; Nos. 1865-1866 (cf. Caylus, *Rec.* VI, p. 288, pl. xc, 5); Nos. 1867-76 (cf. Caylus, *Rec.* VII, p. 267, pl. LXXV, 5); Nos. 1877-79; Nos. 1880-1881 (cf. Caylus, VI, p. 288, pl. xc, 6). See also Caylus, I, p. 235, pl. xci, 5.

Monumenti Antichi, VII (1897), col. 552, Nos. 398, 399 (perhaps for use on horses).

Notizie degli Scavi:

1877, pp. 9 (perhaps an *ex voto* offering), 12, 62, 63, 77, 83, 84, 215.

1878, p. 37.

1879, pp. 24, 45, 69, 75, 241.

Mau, in *Bullettino*: XIII (1898), p. 47.

Revue Archéologique: 1857-58, pl. 322, 12, opp. p. 598.

Other cases in the literature where undeniable words for bell occur, but give no information of value, are these:

Dem. cont. *Aristog.* I, p. 797, § 90.

Long. de *Subl.* 23, 4.

Arist. de *Sens.* p. 446, b. 22.

It must also be noted that the word κῶδων is used in other senses than that of 'bell,' meaning the flaring bell-shaped part of trumpets and other such instruments (Poll. 6, 110; 10, 56; Soph. *Aj.* 17; Schol. ad Hom. *Il.* 18, 219), while in one other passage (Ar. *Pax.* 1079) its meaning is very uncertain, and some think that in connection with the word ἀκαλανθίς it means a kind of hound.

To arrive at a full understanding of some of the uses of bells is, with the scanty data available to us, impossible. In some cases, indeed, merely to state the evidence is the utmost that we can safely do. Though in several places I have suggested what seem to me to be possible interpretations of certain puzzling questions, it is largely with the purpose of collecting material on the subject that these notes have been brought together.

I greatly regret that it was not until this paper had been written and the type had been set up that there came into my hands the valuable

article of A. B. Cook, in the *Journal of Hellenic Studies*, XXII, pp. 5-28, entitled: "The Gong at Dodona." This article starts with a discussion of the λέβητες at Dodona and treats of various topics with which I have attempted to deal. But inasmuch as Mr. Cook does not take up at all the practical uses of bells, and as I have collected on the superstitious uses not a little material which does not appear in his article, I trust that in presenting my results I am not to any great extent duplicating his excellent work.

For much assistance and advice I am indebted to Professor M. H. Morgan and to other members of the Faculty of the Classical Department.